INDEX

ABSENCE of nerve degeneration in chronic thiamine deficiency in pigs 283
Absorption, intestinal, of galactose in rat as affected by suboptimal intakes of thiamine 197
Acid, amino, requirements of the chick 325
—— ascorbic, and carotene or vitamin A content. Nutritive value of canned foods. II. 107
—— —— relation of blood level of, to tissue concentrations of this vitamin and to histology of incisor teeth in the guinea pig 347
—— —— requirements, for saturation of ten normal young women, variations in ... 413
—— folic, and biotin deficiencies in the mouse 203
—— linoleic, and dietary fat, role of, in lactation of the rat 81
—— pantothenic, and riboflavin. Nutritive value of canned foods. IV. 123
—— values, plasma ascorbic, study of, with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status 383
Acids, hog liver fatty, toxicity of fractions of, to chicks fed a vitamin E deficient diet 297
Adequacy of simplified diets for the pig 165
Albino rat, effect of feed on critical temperature for 359
—— —— efficiency of, utilization of phosphorus by 17
ALMQUIST, HERMAN J., AND CHARLES R. GRAU. The amino acid requirements of the chick ....
—— —— —— See Grau and Almquist ... 325
Amino acid requirements of the chick 263
Anemia, dietary, in the pigeon 325
Aorta, cholesterol deposition in, ineffectiveness of vitamin E in preventing 395
Appetite and food utilization in riboflavin deficiency 289
ARCHDEACON, JAMES W., AND JOHN R. MURLIN. The effect of thiamine depletion and restoration on muscular efficiency and endurance 157
Ascorbic acid and carotene or vitamin A content. Nutritive value of canned foods. II. 241
—— —— relation of blood level of, to tissue concentrations of this vitamin and to histology of incisor teeth in the guinea pig 107
—— —— requirements for saturation of ten normal young women, variations in ... 347
—— —— values, plasma, study of, with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status 413
Assay, bological, of vitamin A by means of its influence on the cellular contents of the vagina of rats 383
Atwater sys'em of calculating the caloric value of diets 365

BARTLETT, M. See Darling, Johnson, Pitts, Consolazio and Robinson 443
BASTRON, HARRY. See Denton, Cabell, Bastron and Davis 273
Beans, other, peas and soybeans, germinated, production of vitamins in 421
BENNETT, EMMETT. The fractionation of phosphorus compounds in certain vegetables 63
BERRYMAN, GEORGE H. See French, Berryman, Goorley, Harper, Harkness and Thacker 269
Beta-lactose and lactose inadequacy of, as dietary carbohydrates for the rat 63
Biological assay of vitamin A by means of its influence on the cellular contents of the vagina of rats 225
—— —— and digestibility of soybean protein in whole soybeans, soybean flour, and soybean milk 365
Biotin and folic acid deficiencies in the mouse 209
BLACK, ALEX. See Nielsen and Black 203
Blood level of ascorbic acid, relation of, to tissue concentrations of this vitamin and to histology of incisor teeth in the guinea pig 203
—— plasma in guinea pigs, vitamin C level of 347
BRODY, SAMUEL. See Kibler and Brody 89
BRUSH, MIRIAM K., WINIFRED F. HINMAN AND EVELYN G. HALLIDAY The nutritive value of canned foods. V. Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits 27

CABELL, C. A. See Denton, Cabell, Bastron and Davis 131
CAHILL, WILLIAM M., LAWRENCE J. SCHROEDER AND ARTHUR H. SMITH. Digestibility and biological value of soybean protein in whole soybeans, soybean flour, and soybean milk 421
CALDWELL, EMILY. See Pressley, Ridder, Smith and Caldwell 209
Caloric value of diets, Atwater system of calculating 107
Canine hysteria produced by feeding certain baked dog foods and wheat gluten flour, study of 443
Canned foods, nutritive value of. II. Ascorbic acid and carotene or vitamin A content 431
—— —— —— —— V. Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits 107
—— —— —— —— I. Introduction and sampling procedure 131
—— —— —— —— IV. Riboflavin and pantothenic acid 101
—— —— —— —— III. Thiamine and niacin 123
Carbohydrate or fat, high intake of, effect of. Utilization of thiamine in human subject 117
Carbohydrates, complex, of some Chinese foods 51
—— dietary, for the rat, inadequacy of lactose and beta-lactose as 407
Caries, dental, in the cotton rat. I. Methods of study and preliminary nutritional experiments 225
Carotene or vitamin A content and ascorbic acid. Nutritive value of canned foods. II. 333
CARPENTER, THORNE M. See Ritzman and Carpenter 107
—— —— —— The effects of sugars on the respiratory exchange of cats 71
Cellular contents of the vagina of rats, biological assay of vitamin A by means of its influence of 315
CHAPMAN, C. W. See Karel and Chapman .. 365
Chick(s), amino acid requirements of 89
—— fed a vitamin E deficient diet, toxicity of fractions of hog liver fatty acids to .. 325
—— requirement of tryptophane by 297
—— studies of unidentified vitamins required by 363
Chickens, growing, metabolic changes in 175
Children, preschool, further studies on vitamin C metabolism of 27

Chinese foods, some, complex carbohydrates of 407
CHITTENDEN, RUSSELL HENRY, February 18, 1856–December 26, 1943. An appreciation 3
Cholesterol deposition in the aorta, ineffectiveness of vitamin E in preventing 289
Choline and pyridoxine content of meats 219
Chronic thiamine deficiency in pigs, absence of nerve degeneration in 283
CLIFCORN, LA VERNE E. The nutritive value of canned foods. I. Introduction and sampling procedure 101
Complex carbohydrates of some Chinese foods 407
Composition of diet on riboflavin requirement of rat, effect of 141
Compounds, phosphorus, fractionation of, in certain vegetables 269
Concentrations, tissue, of ascorbic acid, relation of blood level of this vitamin to, and to histology of incisor teeth in the guinea pig 347
CONSOLAZIO, FRANK C. See Darling, Johnson, Pitts, Consolazio and Robinson 273
Cooking methods, institutional, effect of, on vitamin content of foods. I. The thiamine content of potatoes 255
Cotton rat, dental caries in. I. Methods of study and preliminary nutritional experiments 333
Cottonseed, soybean, and peanut flours, protein nutritional value of, and their value as supplements to wheat flour 41
COWGILL, GEORGE R. Russell Henry Chittenden, February 18, 1856–December 26, 1943. An appreciation 3
CRANDALL, WILLIAM A. See Pugsley, Wills and Crandall 365
Critical temperature, effect of feed on, for albino rat 359
CUADROS, ANA MARIA. See Munsell, Cuadros and Suárez 383
CUNNINGHAM, MARY E. See Thompson, Cunningham and Snell 123

DAM HENRIK. Ineffectiveness of vitamin E in preventing cholesterol deposition in the aorta 289
—— —— Toxicity of fractions of hog liver fatty acids to chicks fed a vitamin E deficient diet 297
DARLING, ROBERT C., ROBERT E. JOHNSON, GROVER C. PITTS, FRANK C. CONSOLAZIO AND PAUL F. ROBINSON, with the technical assistance of A. Kibler and M. Bartlett. Effects of variations in dietary protein on the physical well being of men doing manual work 273
DAVENPORT, MARY T. See Forbes, Swift, Marcy and Davenport 189
DAVIS, RUSSELL. See Denton, Cabell, Bastron and Davis 421
Deficiencies, biotin and folic acid, in the mouse 203
Deficiency, chronic thiamine, in pigs, absence of nerve degeneration in 283
—— riboflavin, food utilization and appetite in 157
Deficient diet, vitamin E toxicity of fractions of hog liver fatty acids to chicks fed 297
Degeneration, nerve, in chronic thiamine deficiency, absence of, in pigs 283
Dental caries in the cotton rat. I. Methods of study and preliminary nutritional experiments 333
DENTON, CHARLES A., C. A. CABELL, HARRY BASTRON AND RUSSELL DAVIS. The effect of spray-drying and the subsequent storage of the dried product on the vitamin A, D, and riboflavin content of eggs 421
DEUEL, HARRY J., JR. See Ershoff and Deuel 225
Diet(s), caloric value of, Atwater system of calculating 443
—— effect of composition of, on riboflavin requirement of rat 141
—— simplified, adequacy of, for the pig 165
—— used in Puerto Rico by groups of individuals of widely varied economic status, study of plasma ascorbic acid values with relation to type of 383
Diet(s), vitamin E deficient, toxicity of fractions of hog liver fatty acids to chicks fed 297
Dietary anemia in the pigeon 395
—— carbohydrates for the rat, inadequacy of lactose and beta-lactose as 225
—— fat and linoleic acid, role of, in lactation of the rat 81
—— protein, effects of, variations in, on the physical well being of men doing manual work 273
Digestibility and biological value of soybean protein in whole soybeans, soybean flour, and soybean milk 209
Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits. Nutritive value of canned foods. V. 131
DIVINE, J. P. See Breese and Divine 41
Dog foods, certain baked, and wheat gluten flour, canine hysteria produced by feeding, study of 431
Dried product, subsequent storage of, on the vitamin A, D, and riboflavin content of eggs, and effect of spray-drying 421

EDITORIAL review. The Atwater system of calculating the caloric value of diets 443
—— —— —— nutritional significance of inositol 305
Effect(s) of feed on the critical temperature for the albino rat 359
—— of glucose, fructose, and galactose on the respiratory exchange of the goat 71
—— —— high intake of carbohydrate or of fat. Utilization of thiamine in human subject 51
—— —— institutional cooking methods on the vitamin content of foods. I. The thiamine content of potatoes 255
—— —— spray-drying and the subsequent storage of the dried product on the vitamin A, D, and riboflavin content of eggs 421
—— —— sugars on the respiratory exchange of cats 315
—— of the composition of the diet on the riboflavin requirement of the rat 141
—— —— thiamine depletion and restoration on muscular efficiency and endurance 241
—— —— variations in dietary protein on the physical well being of men doing manual work 273
Efficiency, muscular, and endurance, effect of thiamine depletion and restoration on 241
—— of utilization of phosphorus by albino rat 17
Eggs, hen, thiamine content of, during incubation 235
—— vitamin A, D, and riboflavin content of, effect of spray-drying and the subsequent storage of the dried product on 421
EHEART, MARY S. See Kline and Eheart 413
ELSOM, KATHERINE O. See Gunther, Nicholson and Elsom 51
ELVEHJEM, CONRAD A. See Ives, Wagner, Elvehjem and Strong 117
—— —— —— —— McIntire, Schweigert and Elvehjem 219
—— —— —— —— —— —— —— Herbst and Elvehjem 35
—— —— —— —— —— Mannering and Elvehjem 157
—— —— —— —— —— —— Orsini and Elvehjem 141
—— —— —— —— —— Shaw, Schweigert, McIntire, Elvehjem and Phillips 333
—— —— —— —— —— Wagner and Elvehjem 431
Endurance and muscular efficiency, effect of thiamine depletion and restoration on 241
ERSHOFF, BENJAMIN H., AND HARRY J. DEUEL, JR. Inadequacy of lactose and beta-lactose as dietary carbohydrates for the rat 225
Experiments, preliminary nutritional, and methods of study. Dental caries in the cotton rat. I. 333

FAT, dietary, and linoleic acid, role of, in lactation of the rat 81
—— or carbohydrate, high intake of, effect of. Utilization of thiamine in human subject 51
Fatty acids, hog liver, toxicity of fractions of, to chicks fed a vitamin E deficient diet . 297
Feed, effect of, on critical temperature for albino rat 359
Flour, soybean, whole soybeans, and soybean milk, digestibility and biological value of soybea protein in 209
—— wheat gluten, and certain baked dog foods, canine hysteria produced by feeding, study of 431
Fours, soybean, peanut, and cottonseed, protein nutritional value of, and their value as supplements to wheat flour 41
Folic acid and biotin deficiencies in the mouse 203
FOLLIS, RICHARD H., JR. See Wintrobe, Follis, Humphreys, Stein and Lauritsen ..
Food utilization and appetite in riboflavin deficiency 283
Foods, canned, nutritive value of. II. Ascorbic acid and carotene or vitamin A content . 157
—— —— —— —— —— V. Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits 107
—— —— —— —— —— I. Introduction and sampling procedure 131
—— —— —— —— —— IV. Riboflavin and pantothenic acid 101
—— —— —— —— —— III. Thiamine and niacin 123
—— certain baked dog, and wheat gluten flour, canine hysteria produced by feeding, study of 117
—— effect of institutional cooking methods on vitamin content of. I. The thiamine content of potatoes 431
—— some Chinese, complex carbohydrates of 255
FORBES, ERNEST B., RAYMOND W. SWIFT, LAWSON F. MARCY AND MARY T. DAVENPORT. Protein intake and heat production 407
Fractionation of phosphorus compounds in certain vegetables 189
Fractions of hog liver fatty acids, toxicity of, to chicks fed a vitamin E deficient diet . 269
FREE, ALFRED H. See Leonards and Free .. 297
FRENCH, CYRUS E., GEORGE H. BERRYMAN, JOHN T. GOORLEY, HAROLD A. HARPER, DAVID M. HARKNESS AND EDWARD J. THACKER. The production of vitamins in germinated peas, soybeans and other beans 197
Fructose, glucose, and galactose, effects of, on respiratory exchange of the goat 63
Fruits and vegetables, canned, solid and liquid portions of, distribution of water soluble vitamins between. Nutrition value of canned foods. V. 71
Further studies on the vitamin C metabolism of preschool children 131

GALACTOSE, glucose, and fructose, effects of, on respiratory exchange of the goat . 93
—— in rat, intestinal absorption of, as affected by suboptimal intakes of thiamine 71
Germinated peas, soybeans, and other beans, production of vitamins in 197
Glucose, fructose, and galactose, effects of, on respiratory exchange of the goat 63
Gluten flour, wheat, and certain baked dog foods, canine hysteria produced by feeding, study of 71
Goat, respiratory exchange of, effects of glucose, fructose, and galactose on 431
GOORLEY, JOHN T. See French, Berryman, Goorley, Harper, Harkness and Thacker 71
GRAU, CHARLES R., AND HERMAN J. ALMQUIST. Requirement of tryptophane by the chick 63
—— —— —— See Almquist and Grau .. 263
Greens, wild, vitamin C content of 325
Guinea pig, incisor teeth in, histology of, relation of blood level of ascorbic acid to tissue concentrations of this vitamin and to 427
—— pigs, vitamin C level of blood plasma in 347
89

HALLIDAY, EVELYN G. See Brush, Hinman and Halliday 131
HARKNESS, DAVID M. See French, Berryman, Goorley, Harper, Harkness and Thacker 63
HARPER, HAROLD A. See French, Berryman, Goorley, Harper, Harkness and Thacker 63
HATHAWAY, MILICENT L. See Meyer and Hathaway 93
Heat production and protein intake 189
Hen eggs, thiamine content of, during incubation 235
HERBST, EDWARD J. See McIntire, Schweigert, Herbst and Elvehjem 35
HEUSER, GUSTAVE F. See Hill, Norris and Heuser 175
HILL, FREDERIC W., LEO C. NORRIS AND GUSTAVE F. HEUSER. Studies of unidentified vitamins required by the chick 175
HINMAN, WINIFRED F. See Brush, Hinman and Halliday 131
Histology of the incisor teeth in the guinea pig, relation of blood level of ascorbic acid to tissue concentrations of this vitamin and to 347
Hog liver fatty acids, toxicity of, fractions of, to chicks fed a vitamin E deficient diet . 297
HOGAN, ALBERT G. See McRoberts and Hogan 165
Human subject, utilization of thiamine in: effect of high intake of carbohydrate or of fat 51
HUMPHREYS, STEWART. See Wintrobe, Follis, Humphreys, Stein and Lauritsen 283
Hypercalcemia, production of, with small amounts of vitamin D 7
Hysteria, canine, produced by feeding certain baked dog foods and wheat gluten flour, study of 431

INADEQUACY of lactose ad bneta-lactose as dietary carbohydrates for the rat 225
Incisor teeth, histology of, in the guinea pig, relation of blood level of ascorbic acid to tissue concentrations of this vitamin and to 347
Incubation, thiamine content of hen eggs during 235
Ineffectiveness of vitamin E in preventing cholesterol deposition in the aorta 289
Influence on the cellular contents of the vagina of rats, biological assay of vitamin A by means of 365
Inositol, nutritional significance of, editorial review 305
Institutional cooking methods, effect of, on vitamin content of foods. I. The thiamine content of potatoes 255
Intake, high, of carbohydrate or fat, effect of. Utilization of thiamine in human subject 51
—— protein, and heat production 189
Intestinal absorption of galactose in the rat as affected by suboptimal intakes of thiamine 197
Introduction and sampling procedure. Nutritive value of canned foods. I. 101
IVES MARGARET, JOSEPH R. WAGNER, CONRAD A. ELVEHJEM AND FRANK M. STRONG. The nutritive value of canned foods. III. Thiamine and niacin 117

JOHNSON, ROBERT E. See Darling, Johnson, Pitts, Consolazio and Robinson ... 273
JONES, D. BREESE AND J. P. DIVINE. The protein nutritional value of soybean, peanut, and cottonseed flours and their value as supplements to wheat flour 41
JONES, JAMES H. The production of hypercalcemia with small amounts of vitamin D 7

KAREL, LEONARD, AND C. W. CHAPMAN. The vitamin C level of the blood plasma in guinea pigs 89

KIBLER, A. See Darling, Johnson, Pitts, Consolazio and Robinson 273
KIBLER, HUDSON H., AND SAMUEL BRODY. Metabolic changes in growing chickens . 27
KLINE, ALICE B., AND MARY S. EHEART. Variations in the ascorbic acid requirements for saturation of ten normal young women 413
KUETHER, CARL A., IRA R. TELFORD AND JOSEPH H. ROE. The relation of the blood level of ascorbic acid to the tissue concentrations of this vitamin and to the histology of the incisor teeth in the guinea pig 347
KUNG, LAN CHEN. Complex carbohydrates of some Chinese foods 407

LACTATION of the rat, role of dietary fat and linoleic acid in 81
Lactose and beta-lactose, inadequacy of, as dietary carbohydrates for the rat 225
LAURITSEN, MARJORIE. See Wintrobe, Follis, Humphreys, Stein and Lauritsen 283
LEONARDS, JACK R., AND ALFRED H. FREE. Intestinal absorption of galactose in the rat as affected by suboptimal intakes of thiamine 197
Level, blood, of ascorbic acid, relation of, to tissue concentrations of this vitamin and to histology of incisor teeth in the guinea pig 347
—— vitamin C, of blood plasma in guinea pigs 89
LINGENFELTER, JOHN F. See Loosli, Lingenfelter, Thomas and Maynard 81
Linoleic acid and dietary fat, role of, in lactation of the rat 81
Liver, fatty acids, hog, toxicity of fractions of, to chicks fed a vitamin E deficient diet 297
LOOSLI, JOHN K., JOHN F. LINGENFELTER, JOHN W. THOMAS AND LEONARD A. MAYNARD. The role of dietary fat and linoleic acid in the lactation of the rat 81

McINTIRE, JUNIUS M., BERNARD S. SCHWEIGERT AND CONRAD A. ELVEHJEM. The choline and pyridoxine content of meats 219
—— —— —— —— EDWARD J. HERBST AND CONRAD A. ELVEHJEM. Vitamin content of variety meats 35
—— —— —— —— See Shaw, Schweigert, McIntire, Elvejem and Phillips 333
MCKIBBEN, J. WARREN. See Scrimshaw, Thomas, McKibben, Sullivan and Wells 235
MCROBERTS, VERNON F., AND ALBERT G. HOGAN. Adequacy of simplified diets for the pig 165
MANNERING, GILBERT J., AND CONRAD A. ELVEHJEM. Food utilization and appetite in riboflavin deficiency 157
—— —— —— DEMOSTHENES ORSINI AND CONRAD A. ELVEHJEM. Effect of the composition of the diet on the riboflavin requirement of the rat 141
MARCY, LAWSON F. See Forbes, Swift, Marcy and Davenport 189
—— —— —— The efficiency of utilization of phosphorus by the albino rat 17
MAYNARD, LEONARD A. Editorial Review. The Atwater system of calculating the caloric value of diets 443
—— —— —— See Loosli, Lingenfelter, Thomas and Maynard 81
Meats, choline and pyridoxine content of ... 219
—— variety, vitamin content of 35
Men doing manual work, effects of variations in dietary protein on the physical well being of 273
Metabolic changes in growing chickens 27
Metabolism, vitamin C, of preschool children, further studies on 93
Methods, institutional cooking, effect of, on vitamin content of foods. I. The thiamine content of potatoes 255
—— of study and preliminary nutritional experiments. Dental caries in the cotton rat. I. 333
MEYER, FRIEDA L., AND MILICENT L. HATHAWAY. Further studies on the vitamin C metabolism of preschool children 93
Milk, soybean, whole soybeans, and soybean flour, digestibility and biological value of soybean protein in 209
Mouse, biotin and folic acid deficiencies in . 203
MUNSELL, HAZEL E., ANA M. CUADROS AND RAMON M. SUÁREZ. A study of plasma ascorbic acid values with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status 383
MURLIN, JOHN R. See Archdeacon and Murlin 241
MURRAY, HAZEL C., AND ROBERT STRATTON. Vitamin C content of wild greens 427
Muscular efficiency and endurance, effect of thiamine depletion and restoration on .. 241
Nerve degeneration in chronic thiamine deficiency, absence of, in pigs 283

NIACIN and thiamine. Nutritive value of canned foods. III. 117
NICHOLSON, JOSEPH T. L. See Gunther, Nicholson and Elsom 51
NIELSEN, EDWARD, AND ALEX BLACK. Biotin and folic acid deficiencies in the mouse . 203
Normal young women, ten, variations in ascorbic acid requirements for saturation of 413
NORRIS, LEO C. See Hill, Norris and Heuser 175
Nutritional experiments, preliminary, and methods of study. Dental caries in the cotton rat. I. 333
—— significance of inositol. Editorial Review 305
—— value, protein, of soybean, peanut, and cottonseed flours and their value as supplements to wheat flour 41
Nutritive value of canned foods. II. Ascorbic acid and carotene or vitamin A content . 107
—— —— —— —— —— V. Distribution of water soluble vitamins between solid and liquid portions of canned vegetables and fruits 131
—— —— —— —— I. Introduction and sampling procedure 101
—— —— —— —— IV. Riboflavin and pantothenic acid 123
—— —— —— —— III. Thiamine and niacin 117

ORSINI, DEMOSTHENES. See Mannering, Orsini and Elvehjem 141

PANTOTHENIC acid and riboflavin. Nutritive value of canned foods. IV. 123
Peanut, soybean, and cottonseed flours, protein nutritional value of, and their value as supplements to wheat flour 41
Peas, soybeans, and other beans, germinated, production of vitamins in 63
PHILLIPS, PAUL H. See Shaw, Schweigert, McIntire, Elvehjem and Phillips 333
Phosphorus compounds, fractionation of, in certain vegetables 269
—— utilization of, by albino rat, efficiency of 17
Pig(s), absence of nerve degeneration in chronic thiamine deficiency in 283
—— adequacy of simplified diets for 165
—— guinea, incisor teeth in, histology of, relation of blood level of ascorbic acid to tissue concentrations of this vitamin and to 347
—— —— vitamin C level of blood plasma in 89
Pigeon, dietary anemia in 395
PITTS, GROVER C. See Darling, Johnson, Pitts, Consolazio and Robinson 273
Plasma ascorbic acid values, study of, with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status 383
—— blood, in guinea pigs, vitamin C level of 89
Potatoes, thiamine content of. Effect of institutional cooking methods on vitamin content of foods. I. 255
Preschool children, further studies on vitamin C metabolism of 93

PRESSLEY, ANNE, CLARA RIDDER, M. C. SMITH AND EMILY CALDWELL. The nutritive value of canned foods. II. Ascorbic acid and carotene or vitamin A content 107
Production, heat, and protein intake 189
—— of hypercalcemia with small amounts of vitamin D 7
—— —— vitamins in germinated peas, soybeans, and other beans 63
Protein, dietary, effects of, variations in, on the physical well being of men doing manual work 273
—— intake and heat production 189
—— nutritional value of soybean, peanut, and cottonseed flours and their value as supplements to wheat flour 41
—— soybean, digestibility and biological value of, in whole soybeans, soybean flour, and soybean milk 209
Puerto Rico, diet used in, by groups of individuals of widely varied economic status, study of plasma ascorbic acid values with relation to type of 383
PUGSLEY, LEONARD I., GORDON WILLS AND WILLIAM A. CRANDALL. The biological assay of vitamin A by means of its influence on the cellular contents of the vagina of rats 365
Pyridoxine and choline content of meats 219

RAT, albino, effect of feed on critical temperature for 359
—— —— efficiency of, utilization of phosphorus by 17
—— cotton, dental caries in, I. Methods of study and preliminary nutritional experiments 333
—— inadequacy of lactose and beta-lactose as dietary carbohydrates for 225
—— intestinal absorption of galactose in, as affected by suboptimal intakes of thiamine 197
—— lactation of, role of dietary fat and linoleic acid in 81
—— riboflavin requirement of, effect of composition of diet on 141
Rats, vagina of, cellular contents of, biological assay of vitamin A by means of its influence on 365
REINHOLD, JOHN G., JOSEPH T. L. NICHOLSON AND KATHERINE O. ELSOM. The utilization of thiamine in the human subject: the effect of high intake of carbohydrate or of fat 51
Relation of the blood level of ascorbic acid to the tissue concentrations of this vitamin and to the histology of the incisor teeth in the guinea pig 347
Requirement(s), amino acid, of the chick ... 325
—— ascorbic acid, for saturation of ten normal young women, variations in 413
—— of tryptophane by the chick 263
—— riboflavin, of rat, effect of composition of diet on 141
Respiratory exchange of cats, effects of sugars on 315
—— —— —— the goat, effects of glucose, fructose, and galactose on 71
Review, editorial. The Atwater system of calculating the caloric value of diets ... 443
—— —— —— nutritional significance of inositol 305
Riboflavin and pantothenic acid. Nutritive value of canned foods. IV. 123
—— deficiency, food utilization and appetite in 157
—— requirement of rat, effect of composition of diet on 141
—— vitamin A, and D content of eggs, effect of spray-drying and the subsequent storage of the dried product on 421
RIDDER, CLARA. See Pressley, Ridder, Smith and Caldwell 107
RITTMAN, ERNEST G., AND THORNE M. CARPENTER. The effects of glucose, fructose, and galactose on the respiratory exchange of the goat 71
ROBINSON, PAUL F. See Darling, Johnson, Pitts, Consolazio and Robinson 273
ROE, JOSEPH H. See Kuehner, Telford and Roe 347
Role of dietary fat and linoleic acid in the lactation of the rat 81
RUSSELL, HENRY CHITTENDEN, February 18, 1856–December 26, 1943. An appreciation 3

SAMPLING procedure and introduction. Nutritive value of canned foods. I. 101
Saturation of ten normal young women, variations in ascorbic acid requirements for . 413
SCHROEDER, LAWRENCE J. See Cahill, Schroeder and Smith 209
SCHWEIGERT, BERNARD S. See McIntire, Schweigert and Elvehjem 219
—— —— —— —— Herbst and Elvehjem 85
—— —— —— —— Shaw, Schweigert, McIntire, Elvehjem and Phillips 333
SCRIMSHAW, NEVIN S., WILLIAM P. THOMAS, J. WARREN MCKIBBEN, C. R. SULLIVAN AND K. C. WELLS. Thiamine content of hen eggs during incubation 235
SHAW, JAMES H., BERNARD S. SCHWEIGERT, JUNIUS M. MCINTIRE, CONRAD A. ELVEHJEM AND PAUL H. PHILLIPS. Dental caries in the cotton rat. I. Methods of study and preliminary nutritional experiments 333
Simplified diets, adequacy of, for the pig ... 165
SMITH, ARTHUR H. See Cahill, Schroeder and Smith 209
SMITH, M. C. See Pressley, Ridder, Smith and Caldwell 107
SNELL, ESMOND E. See Thompson, Cunningham and Snell 123
Soybean(s), peanut, and cottonseed flours, protein nutritional value of, and their value as supplements to wheat flour ... 41
—— peas, and other beans, germinated, production of vitamins in 63
—— protein, digestibility and biological value of, in whole soybeans, soybean flour, and soybean milk 209
Spray-drying, effect of, and the subsequent storage of the dried product on the vitamin A, D, and riboflavin content of eggs 421
STEIN, HAROLD J. See Wintrobe, Follis, Humphreys, Stein and Lauritsen 283
Storage, subsequent, of the dried product on the vitamin A, D, and riboflavin content of eggs, and effect of spray-drying 421
STRATTON, ROBERT. See Murray and Stratton 427
STREET, HAROLD R. Dietary anemia in the pigeon 395
STRONG, FRANK M. See Ives, Wagner, Elvehjem and Strong 117
Studies, further, on vitamin C metabolism of preschool children 93
—— of unidentified vitamins required by the chick 175
—— —— canine hysteria produced by feeding certain baked dog foods and wheat gluten flour 431
Study of plasma ascorbic acid values with relation to the type of diet used in Puerto Rico by groups of individuals of widely varied economic status 383
SUÁREZ, RAMON M. See Munsell, Cuadros and Suárez 383
Suboptimal intakes of thiamine, intestinal absorption of galactose in the rat as affected by 197
Sugars, effects of, on respiratory exchange of cats 315
SULLIVAN, C. R. See Scrimshaw, Thomas, McKibben, Sullivan and Wells 235
SWIFT, RAYMOND W. The effect of feed on the critical temperature for the albino rat 359
—— —— —— See Forbes, Swift, Marcy and Davenport 189

TEETH, incisor, histology of, in the guinea pig, relation of blood level of ascorbic acid to the tissue concentrations of this vitamin and to 347

TELFORD, IRA R. See Kuether, Telford and Roe 347
Temperature, critical, effect of feed on, for albino rat 359
THACKER, EDWARD J. See French, Berryman, Goorley, Harper and Thacker 63
Thiamine and niacin. Nutritive value of canned foods. III. 117
—— content of hen eggs during incubation . 235
—— —— —— potatoes. Effect of institutional cooking methods on vitamin content of foods. I. 255
—— deficiency, chronic, in pigs, absence of nerve degeneration in 283
—— depletion and restoration, effect of, on muscular efficiency and endurance 241
—— suboptimal intakes of, intestinal absorption of galactose in the rat as affected by 197
—— utilization of, in the human subject: effect of high intake of carbohydrate or of fat 51
THOMAS, JOHN W. See Locali, Lingenfelter, Thomas and Maynard 81
THOMAS, WILLIAM P. See Scrimshaw, Thomas, McKibben, Sullivan and Wells 235
THOMPSON, MARY L., MARY E. CUNNINGHAM AND ESMOND E. SNELL. The nutritive value of canned foods. IV. Riboflavin and pantothenic acid 123
Tissue concentrations of ascorbic acid, relation of blood level of this vitamin to, and to histology of incisor teeth in the guinea pig 347
Toxicity of fractions of hog liver fatty acids to chicks fed a vitamin E deficient diet . 297
Tryptophane, requirement of, by the chick .. 263

UNIDENTIFIED vitamins, studies of, required by chick 175
Utilization, food, and appetite in riboflavin deficiency 157
—— of phosphorus, efficiency of, by albino rat 17
—— —— thiamine in the human subject: the effect of high intake of carbohydrate or of fat 51

VAGINA of rats, cellular content of, biological assay of vitamin A by means of its influence on 365
Variations in the ascorbic acid requirements for saturation of ten normal young women 413
Variety meats, vitamin content of 35
Vegetables and fruits, canned, solid and liquid portions of, distribution of water soluble vitamins between. Nutritive value of canned foods. V. 131
—— certain, fractionation of phosphorus compounds in 269
Vitamin(s) A, biological assay of, by means of its influence on the cellular contents of the vagina of rats 365
—— —— content or carotene and ascorbic acid. Nutritive value of canned foods. II. 107
—— —— D, and riboflavin content of eggs. effect of spray-drying and the subsequent storage of the dried product on 421
Vitamin(s) C content of wild greens 427
—— —— level of the blood plasma in guinea pigs 89
—— C metabolism of preschool children, further studies on 93
—— content of foods, effect of institutional cooking methods on. I. The thiamine content of potatoes 255
—— —— —— variety meats 35
—— D, small amounts of, production of hypercalcemia with 7
—— E deficient diet, toxicity of fractions of hog liver fatty acids to chicks fed .. . 297
—— —— ineffectiveness of, in preventing cholesterol deposition in the aorta 289
—— production of, in germinated peas, soybeans, and other beans 63
—— relation of the blood level of ascorbic acid to the tissue concentrations of, and to the histology of the incisor teeth in the guinea pig 347
—— unidentified, studies of, required by chick 175
—— water soluble, distribution of, between solid and liquid portions of canned vegetables and fruits. Nutritive value of canned foods. V. 131

WAGNER, JOSEPH R. AND CONRAD A. ELVEHJEM. A study of canine hysteria produced by feeding certain baked dog foods and wheat gluten flour 431
—— —— —— See Ives, Wagner, Elvehjem and Strong 117
Water soluble vitamins, distribution of, between solid and liquid portions of canned vegetables and fruits. Nutritive value of canned foods. V. 131
WEIR, CLARA E. See Wertz and Weir 255
WELLS, K. C. See Scrimshaw, Thomas, McKibben, Sullivan and Wells 235
WERTZ, ANNE W., AND CLARA E. WEIR. The effect of institutional cooking methods on the vitamin content of foods. I. The thiamine content of potatoes 255
Wheat flour, protein nutritional value of soybean, peanut, and cottonseed flours and their value as supplements to 41
—— gluten flour and certain baked dog foods, canine hysteria produced by feeding, study of 431
WILLS, GORDON. See Pugsley, Wills and Crandall 365
WINTROBE, MAXWELL M., RICHARD H. FOLLIS, JR., STEWART HUMPHREYS, HAROLD J. STEIN AND MARJORIE LAURITSEN. Absence of nerve degeneration in chronic thiamine deficiency in pigs 283
WOOLLEY, DILWORTH W. Editorial Review. The nutritional significance of inositol .. 305
Women, ten normal young, variations in ascorbic acid requirements for saturation of 413